

present amendment, Claims 1, 2, 5-7, 10, 11, 13 and 14 will remain.

The Examiner objects to the title as not descriptive of the invention. Applicant has amended the title to be more descriptive.

The Examiner rejects Claims 6 and 11 under 35 USC §112, second paragraph, because the phrase "said freewheeling diodes" lacks antecedent basis. Applicant believes that as amended, Claims 6 and 11 have proper antecedent basis.

The Examiner rejects Claim 14 under 35 USC §112, second paragraph, because the phrase "said second diodes" lacks antecedent basis. Applicant has amended Claim 14 to instead recite "said at least one second diode", a phrase having proper antecedent basis. (Applicant has also made the same amendment to Claim 13, although the Examiner did not reject Claim 13 on that basis.)

The Examiner rejects Claims 1-12 under 35 USC §102(e) as anticipated by Sato et al. Applicant has cancelled Claims 3, 4, 8, 9 and 12.

Regarding Claims 1 and 7, Applicant has amended these claims to recite that the freewheeling current path includes at least one, but not more than two, freewheeling diodes coupled substantially across the bridge rectifier. Such a configuration is not taught or suggested by Sato et al. In citing Sato et al., the Examiner referred to D5/D4/D6 as the freewheeling current path. Applicant does not necessarily agree that these diodes act as a freewheeling current path. Nonetheless, the amendments to Claims 1 and 7 more particularly define Applicant's invention.

In Applicant's disclosure, the number of diode voltage drops in the freewheeling current path (diodes 37 and 38 in Figure 1 of the present application) is less than the number of diode voltage drops in any freewheeling current path through the rectifier (either diodes 30, 28 and 36 or diodes 34, 32 and 36). Thus, in the present disclosure, the easiest path for freewheeling current is through the freewheeling current path comprising diodes 37 and 38. The bulk of the freewheeling current thus goes through that path.

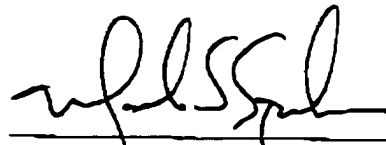
In Sato et al., by contrast, there are three diode voltage drops in path D5/D4/D6, the path referred to by the Examiner as the freewheeling current path. Thus, the advantage of a smaller diode voltage drop in the freewheeling current path is not present in Sato et al. Further, Sato et al. does not suggest eliminating any of diodes D5/D4/D6 (nor is it clear that the design of Sato et al. would continue to be operative if such a diode were eliminated). Applicant respectfully requests that if the Examiner argues in a further office action that the prior art suggests that one of diodes D5/D4/D6 of Sato et al. can be eliminated, the Examiner identify the motivation for making such a change to Sato et al. and clearly explain why such a modified structure would be operative.

The Examiner objects to Claim 13 as dependent upon a rejected base claim. Applicant has rewritten Claim 13 in independent form and thanks the Examiner for his indication of allowable subject matter.

C O N C L U S I O N

Based on the foregoing comments, Applicants respectfully submit that Claims 1, 2, 5-7, 10, 11, 13 and 14 of the above-identified application are in condition for allowance, and such allowance is solicited. If any further amendment is necessary to advance prosecution and place this case in allowable condition, the Examiner is invited to contact the undersigned by fax or telephone at the number listed below.

Respectfully submitted,



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